

## Key Stage 2 Cycle Map A (2022-23)

As	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Topic Title</b>	Stone Age to Iron Age		Out and about		Wonders of the World	
<b>Science Y3</b>	Forces and magnets	Light	Rocks	Plants	Plants/Animals inc humans	
<b>Science Y4</b>	<p><b>Sound Good Vibrations</b>  <b>Objectives covered:</b>            Asking relevant questions and using different types of scientific enquiries to answer them.            Setting up simple practical enquiries, comparative and fair tests.            Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.            Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions.            Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.            Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.            Using straightforward scientific evidence to answer questions or to support their findings.            Identify how sounds are made, associating some of them with something vibrating.            Recognise that vibrations from sounds travel through a medium to the ear.</p>	<p><b>Electricity</b>  <b>Objectives covered:</b>            Identify common appliances that run on electricity.            Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers.            Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery.            Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit.            Recognise some common conductors and insulators, and associate metals with being good conductors.            Setting up simple practical enquiries, comparative and fair tests.            Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.            Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions.            Reporting on findings from</p>	<p><b>States of Matter</b>  <b>Objectives covered:</b>            Asking simple questions and recognising that they can be answered in different ways observing closely, using simple equipment.            Performing simple tests identifying and classifying using their observations and ideas to suggest answers to questions.            Gathering and recording data to help in answering questions asking relevant questions and using different types of scientific enquiries to answer them.            Setting up simple practical enquiries, comparative and fair tests.            Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.            Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.            Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.            Using results to draw simple</p>	<p><b>Animals including humans</b>  <b>Objectives covered:</b>            Asking relevant questions and using different types of scientific enquiries to answer them.            Setting up simple practical enquiries, comparative and fair tests.            Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.            Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.            Identifying differences, similarities or changes related to simple scientific ideas and processes.            Using straightforward scientific evidence to answer questions or to support their findings.            Describe the simple functions of the basic parts of the digestive system in humans.            Identify the different types of teeth in humans and their simple functions.            Construct and interpret a variety of food chains, identifying producers, predators and prey.</p>	<p><b>Living things and their habitats</b>  <b>Objectives covered:</b>            Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.            Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions.            Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.            Identifying differences, similarities or changes related to simple scientific ideas and processes.            Recognise that living things can be grouped in a variety of ways.            Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.            Recognise that environments can change and that this can sometimes pose dangers to living things.</p>	

	Find patterns between the pitch of a sound and features of the object that produced it. Find patterns between the volume of a sound and the strength of the vibrations that produced it. Recognise that sounds get fainter as the distance from the sound source increases.	enquiries, including oral and written explanations, displays or presentations of results and conclusions. Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions, Identifying differences, similarities or changes related to simple scientific ideas and processes.	conclusions, make predictions for new values, suggest improvements and raise further questions. Identifying differences, similarities or changes related to simple scientific ideas and processes. Compare and group materials together, according to whether they are solids, liquids or gases. Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C). Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.			
<b>Science Y5</b>	Properties and changes of materials	Forces	Earth and space	Living things and their habitats	Animals including humans	
<b>Science Y6</b>	Evolution and inheritance	Animals including humans	Light and electricity	Light	Living things and their habitats	
<b>History Geography *</b>	<b>Pre-historic Britain (PB) (Stone Age / Iron Age)</b>  <b>Stone Age Day 20.09.22</b>  <i>National Curriculum Subject content</i> <i>KS2 - changes in Britain from the Stone Age to the Iron Age</i>  <i>CC links to science</i> <i>Year 3 - describe in simple terms how fossils are formed when things that have lived are trapped within rock</i>		<i>Paper Mill Lock river walk</i> <i>Investigating Rivers (PB)</i> <i>The United Kingdom (PB)</i>		<b>The Egyptians (PB) – Butterfly Lion??</b> <i>In the Desert (PB)</i>	

*The concepts identified in the Geography National Curriculum were: Place; Space; Scale; Interdependence; Physical and human processes; Environmental interaction and sustainable development; Cultural understanding and diversity. Identifying 'big concepts' such as these for the geography curriculum helps to shape geographical content, focus geographical learning and plan teaching.*

- *Place (what makes up a place?)*
- *Space (the impact of humans on space and why things are in a certain area)*
- *Scale (the comparison of local, regional, national, international, global)*
- *Interdependence (the interconnection/relationships between places and people)*
- *Physical and human processes (how physical geography impacts the area)*
- *Environmental interaction and sustainable development (the capacity of the environment to support our lives and the lives of other living creatures in the future)*
- *Cultural understanding and diversity (Geography offers an amazing combination of being able to study your local area, relate it to your local experience and life knowledge and compare it with other areas)*

and experiences, ideal for schools linking up and sharing experiences". Dr Rita Gardiner, Royal Geographical Society) Connecting classrooms

**National Curriculum Subject Content**

**Locational knowledge**

**Place knowledge**

**Human and Physical geography**

**Geographical skills and fieldwork**

<p><b>Art / DT</b></p>	<p><b>Art</b>                  1 Using modelling wire and other materials to create dinosaur sculptures.                  2 Exploring the history and style of cave paintings, and recreating cave paintings in a variety of ways.                  3 Investigating and recreating Stone Age jewellery using clay and other materials.                  4 Exploring and recreating some mysteries of prehistoric art, including stone balls and Stonehenge.  <i>KS2 - to improve their mastery of art and design techniques, including drawing with a range of materials</i>  <i>KS2 - to improve their mastery of art and design techniques, including sculpture with a range of materials</i>  <b>D&amp;T</b>                  Exploring the origins and development of sewing, and creating a sewn needle pouch or early pair of shoes.  <i>KS2 - select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately</i>  <i>KS2 - select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities</i>  <i>KS2 - understand how key events and individuals in design and technology have helped shape the world</i></p>		<p>River Art??? Hamilton??</p> <p><b>D&amp;T</b>                  Photo Frame</p>	<p><b>Art</b>                  1 Create a picture using papyrus in the style of Egyptian art.                  2 Use modelling clay to make a cartouche including hieroglyphics.                  3 Create and decorate a necklace based on examples of Egyptian jewellery.  <i>KS2 - to improve their mastery of art and design techniques, including drawing with a range of materials</i>  <i>KS2 - to improve their mastery of art and design techniques, including painting with a range of materials</i>  <i>KS2 - to improve their mastery of art and design techniques, including sculpture with a range of materials</i>  <b>D&amp;T</b>                  1 Design, make and evaluate a shaduf after investigating how they work.                  OR pyramid                  2 Discover what foods the ancient Egyptians would have eaten and follow a recipe to make Egyptian bread.  <i>KS2 - use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups</i>  <i>KS2 - generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</i>  <i>KS2 - select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately</i>  <i>KS2 - select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities</i>  <i>KS2 - evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</i>  <i>KS2 - apply their understanding of how to strengthen, stiffen and reinforce more complex structures</i>  <i>KS2 - prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</i></p>		
<p><b>Music French</b></p>	<p>French</p>	<p>Music</p>	<p>French</p>	<p>Music</p>	<p>French</p>	<p>Music</p>
<p><b>PE Europe &amp; Asia PPA cover</b></p>	<p>Invasion Games                  Football – PPA                  Hockey</p>	<p>Invasion Games/Circuits                  Rugby PPA                  Circuits</p>	<p>Netball / Dance                  Basketball/Netball PPA                  Dance</p>	<p>Invasion Games / Gymnastics                  Gymnastics – PPA                  Tennis/Badminton</p>	<p>Athletics / Striking and Fielding Games                  Athletics – PPA                  Cricket</p>	<p>Athletics / Orienteering                  Striking and Fielding Games                  Rounders – PPA                  Orienteering/ Sports day practice</p>
<p><b>PSHE</b></p>	<p>Life-long values - Aspiration</p>	<p>Life-long values - Strength</p>	<p>Life-long values - Perseverance</p>	<p>Life-long values - Integrity</p>	<p>Life-long values - Responsibility</p>	<p>Life-long values – Empathy</p>
<p><b>RE Europe</b></p>	<p>What do Christians learn from the creation story?</p>	<p>What do Christians learn from the Christmas story?</p>				

Asia	What is the Bible and how do people interpret it?	What does it mean if God is holy and loving?				
North America	Creation and science: Conflicting or complementary?	Was Jesus the Messiah?				
<b>Extras</b>						
<b>National Curriculum Computing objectives KS2</b>	<p>Key stage 2 Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</li> <li>use sequence, selection, and repetition in programs; work with variables and various forms of input and output</li> <li>use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</li> <li>understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration</li> <li>use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</li> <li>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</li> <li>use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</li> </ul>					
10 weeks of computing teaching each term	<b>Connecting systems &amp; networks (Teach computing – National centre for teaching computing excellence)</b>	<b>Creating media</b>	<b>Programming A</b>	<b>Data and information</b>	<b>Creating media</b>	<b>Programming B</b>
<b>Europe</b>	3.1 Connecting computers	3.2 Stop frame animation	3.3 Sequencing sounds	3.4 Branching databases	3.5 Desktop publishing	3.6 Events and actions in programs
<b>Asia Cycle Year 1</b>	4.1 The internet	4.2 Audio editing	4.3 Repetition in shapes	4.4 Data logging	4.5 Photo editing	4.6 Repetition in games
<b>Asia Cycle Year 2 (tracking back to y4 skills)</b>	5.1 Sharing information	5.2 Video editing	5.3 Selection in physical computing	5.4 Flat-file databases	5.5 Vector drawing	5.6 Selection quizzes
<b>North America (tracking back to y5 skills)</b>	6.1 Internet communication	6.2 Webpage creation	6.3 Variables in games	6. 4 Introduction to spreadsheets	6.5 3D modelling	6.6 Sensing.
<b>ALL</b>	<b>ONLINE SAFETY</b> Basic skills – copy/paste/save/editing/typing skills/PowerPoint/					
<b>Notes</b>	<b>*Discrete Geography lesson on the UK once every half term – skills or knowledge base.</b>					

